



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,514	12/22/2000	Manjunath Jagannatharao	81862.P225	1055
7590	02/17/2005		EXAMINER	
Sang Hui Michael Kim BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP Seventh Floor 12400 Wilshire Boulevard Los Angeles, CA 90025-1026			NGUYEN, HANH N	
			ART UNIT	PAPER NUMBER
			2662	
			DATE MAILED: 02/17/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/746,514 <i>[initials]</i>	JAGANNATHARAO ET AL.
	Examiner	Art Unit
	Hanh Nguyen	2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 October 2004.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5 and 11-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-5 and 11-20 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 11-13 and 16-18 are rejected under 35 USC 103(a) as being unpatentable over Sathe et al. (Pat. 5,970,067) in view of Nishihara (Pat. 5,764,637).

In claims 1, 11 and 16, Sathe et al. discloses receiving data on a plurality of data links (fig.1, communication node 28 receiving streams of cells on links 1-N, col.4, lines 40-47), the data on at least two respective links being transmitted with a differential transmission delay, such that the plurality of data links includes a slow link having a first transmission delay and at least one other link having a second transmission delay, the first transmission delay longer than the second transmission delay (each of links 1-N has a different delay, see col.4, lines 47-50 and one of which has a longest delay, see col.10, lines 29-37);

writing the data in a delay compensation buffer for each data link, (cells inputted into a delay compensation buffer 96 over each link 1-N, col.5, lines 60-67 & col.10, lines 1-27, figures 3, 10).

The delay compensation buffer having an associated delay corresponding to the first transmission delay (the delay compensation buffer 96 permits delay compensation among links 1-N, such that its size varied to obtain cells within maximum permissible different delay, see col.6, lines 5-10). Sathe et al. further disclose reading the data from the delay compensation buffer (cell read pointer reads cells out of delay compensation buffer 96, see col.10, lines 30-45).

Sathe et al. does not disclose reading the data from the delay compensation buffer for each data link faster than the data is written into the buffer. Nishihara discloses in Fig.3, received cells are written in a cell buffer 101 (the cells are written into a buffer, see col.4, lines 45-50). The cell are read from the buffer 101 faster than the cell written into the buffer 101 (reading the data from the delay compensation buffer for each data link faster than the data is written into the buffer). Col.6, llines 27-41 & lines 55-60.

Therefore, it would have been obvious to one ordinary skilled in the art to use the cell reading method of Nishihara into the node 28 of Sathe et al. in order to read cells from delay buffer faster than cells written into the buffer. The combination can reduce delays made by slow links.

In claims 2 and 17, Sathe et al. discloses the receiving the data includes receiving an asynchronous transfer mode (ATM) data cell(ATM cells are multiplexed over links, see abstract, Fig.1).

In claims 3, 13 and 18, Sathe et al. discloses the receiving data includes receiving the data on one or more T1/E1 data links (each of links 1-N is a T1/E1 link, see col.4, lines 25-30).

*In claim 12, Sathe et al discloses processor (state machine 84, fig.3) that receiving ATM cells (state machine 84 sequences the cells into delay buffer 96, col.5, lines 60-65). Sathe et al. does not disclose instructions executed by the processor to receive ATM cells. However, comprising instructions into a processor of a communication node to receive cells is well-known in the art. Therefore, it would have been obvious for the state machine of Sathe et al. to execute stored instructions in order to receive cells.

Claims 4, 5, 14, 15, 19 and 20 are rejected under 35 USC 103(a) as being unpatentable over Sathe et al. (Pat. 5,970,067) in view of Nishihara (Pat. 5,764,637), and further in view of Lafe et al. (Pat. 6,449,658).

In claims 4, 5, 14, 15, 19 and 20, Sathe et al. has disclosed the system the system discussed above. Sathe et al. does not disclose deleting a slow link and then adding a faster link to the system. However, Lafe discloses a networking system wherein a slow connection is replaced by a faster compressed link (see column 5 lines 17-27). It would have been obvious to one skilled in the art at the time of the invention to implement this feature into Sathe et al. because as Lafe points out in column 3 lines 55 and 56, doing so would allow the system to operate at a faster rate.

Response to Arguments

Applicant's arguments with respect to claims 1-5 and 11-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakayama (Pat. 6198754 B1) discloses Network system, transmitting device and receiving device.

Vallee et al. (Pat. 5608733) discloses ATM Inverse Multiplexing.

Sutton et al. (Pat. 6,148,010) discloses Method and Apparatus for distributing and consolidating data packets onto multiple network interface.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2662

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Hanh Nguyen".

**HANH NGUYEN
PRIMARY EXAMINER**